2006 SOYBEAN CHEMICAL USAGE

Nineteen states were included in the 2006 survey: Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Carolina, North Dakota, Ohio, South Dakota, Tennessee, Virginia, and Wisconsin. Nitrogen was applied to 18 percent of the 2006 soybean planted acres in the Program States at an average rate of 16 pounds per acre per year. Phosphate was applied to 23 percent of the planted acres, at an average rate of 46 pounds per acre. An average of 80 pounds per acre of Potash was applied to 25 percent of the planted acres at an average rate of 11 pounds per acre.

Herbicides were applied to 98 percent of the soybean planted acreage in 2006 in the 19 Program States. Glyphosate isopropylamine salt was the most widely applied herbicide with 92 percent of planted acres treated at an average rate of 1.330 pounds per acres per crop year.

Insecticides were applied to 16 percent of the 2006 soybean planted acreage. The three most common, Lambda-cyhalothrin, Chlorpyrifos, and Esfenvalerate, were applied to 6, 5, and 3 percent of the planted acres, respectively.

SOYBEANS: Fertilizer Use by State, 2006 Percent of Acres Treated and Total Applied

State	Planted Acreage	Nitrogen		Phosphate		Potash		Sulfur	
	1,000 Acres	Percent	Mil. Lbs.	Percent	Mil. Lbs.	<u>Percent</u>	Mil. Lbs.	Percent	Mil. Lbs.
IL	10,100	11	18.1	16	96.0	31	290.2	2/	2/
IN	5,700	16	15.2	20	54.6	32	177.4	2/	2/
IA	10,150	7	10.8	12	64.4	20	172.6	1	0.9
MN	7,350	16	15.3	18	53.2	16	57.4	2/	2/
ND	3,900	43	22.6	42	58.3	3	1.9	2/	2/
SD	3,950	29	19.7	31	49.4	8	8.6	2/	2/
WI	1,650	31	7.4	33	18.0	55	74.2	10	2.3
Total 1/	72,880	18	212.4	23	772.8	25	1,454.7	3	20.0

^{1/} Refers to the 19 major soybean states: AR, IL, IN, IA, KS, KY, LA, MI, MN, MS, MO, NE, NC, ND, OH, SD, TN, VA and WI. 2/ Insufficient reports to publish data for the fertilizer primary nutrient.

SOYBEANS: Frequency and Extent of Usage by Active Ingredient, Minnesota, 2006 1/

Active Ingredient	Area Applied	Applications	Rate per Application	Rate per Year	Total Applied	
	<u>Percent</u>	Number	Lbs. per Acre	Lbs. per Acre	1,000 Pounds	
Herbicides						
Clethodim	3	1.0	0.058	0.058	15	
Glyphosate	5	1.5	0.671	1.005	341	
Glyphosate iso. Salt	93	1.6	0.797	1.300	8,935	
Trifluralin	2	1.0	0.631	0.631	90	
Insecticides						
Chlorpyrifos	23	1.0	0.465	0.484	832	
Esfenvalerate	8	1.1	0.033	0.037	23	
Lambda-cyhalothrin	24	1.1	0.020	0.022	38	

^{1/} Planted acreage in 2006 for Minnesota was 7.4 million acres.

2006 OTHER SPRING WHEAT CHEMICAL USAGE

Six states were included in the 2006 survey for Other Spring Wheat: Idaho, Minnesota, Montana, North Dakota, South Dakota, and Washington. Nitrogen applications averaged 72 pounds per acre per crop year to 95 percent of these States' planted acres. An average of 32 pounds per acre per year of phosphate was applied to 85 percent of the other spring wheat planted acres in the Program States. Potash was applied to 27 percent of the planted acreage at an average of 18 pounds per acre per year in the Program States. Sulfur was applied on 13 percent of the acres planted at an average application rate of 13 pounds per acre per year.

Herbicides were applied to 93 percent of the Program State planted acreage. MCPA, 2-ethyhexyl was the most commonly applied herbicide with 40 percent of the planted acres receiving one application. It was applied at an average rate of 0.281 pounds per acre per year. Bromoxynil octanoate was applied to 32 percent of the planted acres at an average rate of 0.241 pounds per acre per year. Glyphosate isopropylamine salt was used on 30 percent of all planted acres at an average rate of 0.624 pounds per acre per year.

OTHER SPRING WHEAT: Fertilizer Use by State, 2006
Percent of Acres Treated and Total Applied

State	Planted Acreage	Nitrogen		Phosphate		Potash		Sulfur	
	1,000 Acres	Percent	Mil. Lbs.	Percent	Mil. Lbs.	Percent	Mil. Lbs.	Percent	Mil. Lbs.
ID	490	96	60.7	56	9.5	25	3.5	59	8.5
MN	1,700	99	148.5	97	64.0	72	31.6	2	0.4
MT	2,950	86	129.5	81	57.7	21	9.0	10	2.5
ND	7,300	99	504.6	88	202.2	21	13.0	11	4.3
SD	1,850	90	119.4	80	55.6	22	11.9	10	3.5
WA	430	100	43.6	60	4.7	9	1.6	89	6.4
Total 1/	14,720	95	1,006.2	85	393.7	27	70.4	13	25.7

^{1/} Refers to the 6 major Other Spring Wheat producing states: ID, MN, MT, ND, SD, and WA.

OTHER SPRING WHEAT: Frequency and Extent of Usage by Active Ingredient, Minnesota, 2006 1/

Active Ingredient	Area Applied	Applications	Rate per Application	Rate per Year	Total Applied
	Percent	Number	Lbs. per Acre	Lbs. per Acre	1,000 Pounds
Herbicides					
2, 4-D, 2-EHE	10	1.0	0.381	0.381	64
Bromoxynil heptanoat	36	1.0	0.235	0.235	144
Bromoxynil octanoate	65	1.0	0.232	0.232	257
Clopyralid	8	1.0	0.080	0.080	10
Fenoxaprop-p-ethyl	29	1.0	0.075	0.075	37
Flucarbazone-sodium	13	1.0	0.021	0.021	5
Fluroxypyr 1-MHE	7	1.0	0.087	0.087	11
MCPA, 2-ethylhexyl	72	1.0	0.254	0.254	310
MCPA, dimethyl. salt	4	1.0	0.388	0.388	27
Pinoxaden	6	1.0	0.088	0.088	9
Thifensulfuron	11	1.0	0.011	0.011	2
Tribenuron-methyl	9	1.0	0.004	0.004	1
Fungicides					
Propiconazole	9	1.1	0.065	0.074	11
Pyraclostrobin	24	1.0	0.052	0.052	21
Tebuconazole	9	1.0	0.085	0.085	13

^{1/} Planted acreage in 2006 for Minnesota was 1.7 million acres.